Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
Establishing Just and Reasonable Rates for Local Exchange Carriers	)	WC Docket No. 07-135
	)	
High-Cost Universal Service Support	)	WC Docket No. 05-337
	)	
Developing an Unified Intercarrier Compensation Regime	)	CC Docket No. 01-92
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
Lifeline and Link-Up	)	WC Docket No. 03-109

REPLY COMMENTS OF COMCAST CORPORATION

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Comcast Corporation ("Comcast") submits this reply to the comments filed in response to Section XV of the Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking issued by the Federal Communications Commission ("FCC" or "Commission") in the above-captioned proceeding.[1]

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[1] *Connect America Fund; a National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing an Unified Intercarrier Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-Up*, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 07-135, WC Docket No. 05-337, CC Docket No. 01-92, CC Docket No. 96-45, and WC Docket No. 03-109, Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, FCC 11-13 (rel. Feb. 9, 2011) ("NPRM").

I. INTRODUCTION AND SUMMARY

The initial comments filed by Comcast and most other parties in this proceeding demonstrate the need for the Commission to take swift action to address traffic pumping and phantom traffic. Although the commenting parties suggest different remedies for dealing with these problems, they are virtually unanimous in their call for immediate action on these important issues. Comcast agrees. The Commission should promptly:

- Adopt "phantom traffic" rules that prohibit providers from stripping relevant billing information from traffic they hand off to other providers; and
- Put an end to harmful traffic pumping schemes by adopting effective triggers and meaningful enforcement measures that will eliminate carriers' incentives and ability to engage in access stimulation.

Comcast and other commenting parties also emphasized the importance of rapid Commission action to address the urgent need for reform of the existing inefficient intercarrier compensation regime. Comcast favors the prompt adoption of a comprehensive plan that would definitively resolve on a going-forward basis the appropriate treatment of both voice over Internet protocol ("VoIP") traffic as well as traditional time division multiplexing ("TDM") traffic. In the event that implementation of those reforms will require a multi-year transition, however, Comcast recommended that the Commission direct that the rate for transport and termination of VoIP-originated traffic be set using the same methodology that the provider uses to set the rate imposed on local traffic pursuant to section 251(b)(5).[2] As explained below, Comcast's proposed interim approach is the only one that would advance the Commission's cardinal objective of encouraging providers to deploy IP-based broadband networks.

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[2] 47 U.S.C. § 251(b)(5).

II. DISCUSSION

A. Phantom Traffic

There is overwhelming support in the record for the adoption of new rules to curb phantom traffic.[3] Comcast agrees with the majority of commenters that the Commission should not delay its adoption of new rules that: (1) require providers to pass along a calling party's information to the next provider in the transmission path; and (2) bar providers from stripping or altering call signaling information. Some parties recommended that the Commission also require providers to include information such as Location Routing Number ("LRN"), Carrier Identification Code ("CIC") or Operating Company Number ("OCN") in the call-signaling fields of calls that originate on their networks.[4] In Comcast's view, however, the Commission's rules should generally require providers to include all relevant information needed to allow the terminating service provider to identify the originating provider, but should not prescribe the

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[3] *See, e.g.*, Comments of Frontier Communications Corporation at 4, 12-13; Comments of AT&T Inc. at 21-22 ("AT&T Comments"); Comments of Cox Communications, Inc. at 12 ("Cox Comments"); *but see* Comments of the Coalition for Rational Universal Service and Intercarrier Reform on Section XV at 5 (phantom traffic is a temporary issue) ("CRUSIR Comments"). (Unless otherwise indicated, all comments cited herein were filed in WC Docket No. 10-90 on April 1, 2011.)

[4] *See, e.g.*, Comments of the National Exchange Carrier Association, National Telecommunications Cooperative Association, Organization for the Promotion and Advancement of Small Telecommunications Companies, Western Telecommunications Alliance, Eastern Rural Telecom Association, The Rural Alliance, and The Rural Broadband Alliance at 18-29 (proposing that providers be required to include LRN, Jurisdictional Information Parameter ("JIP"), CIC and/or OCN and charge number ("CN") as well as calling party number ("CPN") information) ("NECA, *et al.* Comments"); Comments of PAETEC Holding Corp., Mpower Communications Corp. and U.S. TelePacific Corp., and RCN Telecom Services, LLC at 4-14 ("PAETEC, *et al.* Comments").

particular call-signaling fields that providers must populate for traffic that originates on their networks.[5]

Several commenters argued that the new phantom traffic rules should include exceptions that take into account the fact that the network technology used by some providers is incapable of generating all of the necessary identifying information for calls that originate on their networks.[6] Comcast does not oppose such exceptions, as long as they clearly define the small number of situations in which it is not technically feasible for the originating provider to include the required call-identifying information.[7] In addition, the new rules must make clear how terminating providers should treat calls that are eligible for such an exception (*e.g.*, who the terminating provider should bill and what rate should apply).[8]

Time Warner Cable and others joined Comcast in noting that transiting carriers should be responsible only for passing along information they receive from originating providers.[9] Terminating carriers should not be allowed to hold intermediate carriers

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[5] *Cf.* NPRM ¶ 627 (declining to specify how providers using IP protocols must comply with the proposed new rules governing the transmission of call-identifying information).

[6] *See, e.g.*, Comments of CTIA – The Wireless Association at 3, 9-11 (the FCC should not require the transmission of calling party information when it is infeasible due to network technology) ("CTIA Comments"); Comments of Verizon and Verizon Wireless at 46-51 ("Verizon Comments").

[7] *See* NPRM ¶ 633 ("the proposed rules contain a few very limited exceptions" to accommodate specific issues previously identified in the record.); *see also, e.g.*, NECA, *et al.* Comments at 22-23 (the FCC should define any exceptions to its rules with specificity.)

[8] The rules ultimately adopted by the FCC also should allow for significant penalties to be assessed against providers who violate the new requirements either by failing to provide call-identifying information or by stripping such information from traffic they hand off to other providers.

[9] *See* Comments of Time Warner Cable Inc. at 12 (explaining that the Commission "should not punish the transiting carrier for the sins of the originating carrier, and vice

responsible for traffic they deliver without call identifying information, if that traffic was sent to the transiting provider without the necessary data. Only the party responsible for omitting or stripping the call-identifying information should be liable for passing along phantom traffic.

In addition, as Sprint pointed out, the underlying network provider does not always receive the calling party number ("CPN") from the end user. Some IP-based services, for example, allow subscribers to choose what calling information is provided on calls they originate. Comcast agrees with Sprint that providers should not be held liable for failing to provide call-identifying information associated with calls for which the end user did not provide the necessary information.[10]

B. Traffic Pumping

Comcast is one of a large group of parties that favor the adoption of new rules aimed at eliminating traffic pumping.[11] As Comcast noted in its initial comments, the Commission's proposal to identify traffic pumping schemes based on the existence of revenue sharing arrangements is clearly a step in the right direction, but may not be as effective as some other approaches.[12] Indeed, several parties expressed serious concerns about the effectiveness of the Commission's proposed approach.[13] Many of these parties

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versa") ("TWC Comments"); Comments of Comcast Corporation at 9 ("Comcast Comments"); *see also, e.g.*, AT&T Comments at 23.

[10] Comments of Sprint Nextel Corporation at 26 ("Sprint Comments").

[11] *See, e.g.*, AT&T Comments at 7 ("strongly" urging the FCC to adopt new rules to address traffic pumping); Sprint Comments at 12-20; Comments of Windstream Communications, Inc. on Section XV at 19 ("Windstream Comments"); Comments of Level 3 Communications, LLC at 3; Comments of Neutral Tandem at 4.

[12] Comcast Comments at 10-11.

[13] *See, e.g.*, Sprint Comments at 8, 12-21 (arguing that the FCC's proposal is "too conservative" and noting that it would be difficult to ascertain whether a revenue sharing

proposed alternative, or additional, triggers that would identify traffic pumpers based on, for example, increases in their terminating minutes of use or the ratio of their terminating to originating minutes of use.[14]

Comcast agrees that triggers based on minutes of use likely would be more effective and easier to administer than safeguards that are tied to the existence of revenue sharing agreements. Accordingly, Comcast urges the FCC to consider proposals that would identify traffic pumping schemes by examining a provider's ratio of terminating to originating traffic volumes.[15] Imposing low per-minute rates on traffic terminated by providers that exceed the proposed trigger (*e.g.*, 3:1 terminating to originating volumes) should create an effective deterrent to traffic pumping schemes. If the FCC is concerned that trigger-based rules might sweep too broadly, it can adopt procedures that afford providers the opportunity to show that a traffic ratio that exceeds the prescribed trigger is not caused by an access stimulation scheme.[16] By the same token, the Commission

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trigger has been met); TWC Comments at 15 (expressing concern that rules that focus solely on revenue sharing arrangements would be inadequate); Comments of T-Mobile USA, Inc. at 6 (asserting that the FCC's proposal is infeasible, unenforceable and too lenient) ("T-Mobile Comments").

[14] *See, e.g.*, NECA, *et al.* Comments at 33 (the FCC should adopt minutes-of-use-based triggers); CTIA at 8-9; PAETEC, *et al.* Comments at 22-24.

[15] TWC Comments at 15-16 (urging the FCC to consider additional triggers based on increases in minutes of use ("MOUs") and/or ratio of originating to terminating traffic); Cox Comments at 13 (supporting the use of triggers based on MOUs); T-Mobile Comments at 7 (the FCC should adopt a trigger based on a ratio of 3:1 terminating to originating traffic).

[16] *See* TWC Comments at 16 (arguing that providers should have the opportunity to explain any anomalies in their traffic volumes and demonstrate that they are not engaged in traffic pumping schemes); *cf.* CRUSIR Comments at 6-7 (explaining the potential benefits of certain "free" traffic schemes).

should not preclude interexchange carriers from bringing complaints regarding traffic pumping in instances where the traffic ratio does not exceed the trigger.[17]

The remedy in cases where terminating interstate access traffic exceeds the applicable trigger should be swift and effective. The proposals outlined in the NPRM would be a significant improvement over the *status quo*. Other approaches suggested in the comments, however, may be more successful in deterring traffic pumping schemes. For example, some have proposed that the transport and termination rates for traffic pumping minutes be set at $.0007 per minute.[18] Those rates are likely to be well below the "benchmarks" suggested in the NPRM. Others recommended that the FCC impose mandatory detariffing on competitive local exchange carriers ("LECs") that engage in impermissible revenue sharing.[19] This would require the offending LEC to negotiate intercarrier compensation rates with other carriers and would deprive the traffic pumpers of the "deemed lawful" protection currently afforded by their tariffs.[20]

Another measure that the FCC can and should take to prevent carriers from overcharging for the traffic they terminate is to bar service providers from assessing transport and termination rates for local traffic pursuant to intrastate tariffs where there is no interconnection agreement between the originating and terminating provider.[21]

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[17] Sprint Comments at 9 (proposing that any provider that believes it has been improperly charged for pumped traffic should have the option of filing a complaint "even if the trigger (whatever is adopted) has not been met").

[18] *See, e.g.*, CTIA Comments at 7; Sprint Comments at 8-9; AT&T Comments at 15-17.

[19] *See* Sprint Comments at 20; AT&T at 13-15.

[20] *See* AT&T Comments at 14.

[21] *See* Cox Comments at 13-14 (urging the FCC to ban the use of local termination tariffs where there is no interconnection agreement between the providers); Comments of Cbeyond, Inc., Integra Telecom, Inc., and tw telecom inc. at 16-18 ("Cbeyond, *et al.* Comments").

Carriers have been using these tariffs to impose local termination rates for local traffic that are as high as their access charge rates. The FCC should make clear that in the absence of an interconnection agreement, the default rate for the transport and termination of local traffic is the applicable reciprocal compensation rate.

C. Treatment of VoIP

As several parties recognized, it is important for the FCC to address the appropriate treatment of VoIP traffic as expeditiously as possible.[22] Opinions varied widely, however, regarding the best approach to VoIP-originated traffic.[23] Comcast's proposal – VoIP-originated traffic should be subject to reciprocal compensation rates while the FCC implements more comprehensive reforms for all traffic[24] – is the only one that would effectively advance the Commission's goals of promoting the deployment of broadband-capable IP networks.[25]

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[22] *See, e.g.,* Sprint Comments at 2, T-Mobile Comments at 1-3; Windstream Comments at 2, Verizon Comments at 2. Many parties commenting on the appropriate treatment of VoIP traffic do not specify whether they are using "VoIP" to refer to VoIP-originated traffic, VoIP-terminated traffic or both. As TWC notes, however, the NPRM appears to use "VoIP" to refer to VoIP-originated traffic. *See* TWC Comments at 5-6.

[23] *Compare, e.g.*, T-Mobile Comments at 9-12 (move VoIP to bill-and-keep immediately) *with* Comments of TDS Telecommunications Corporation at 4 and NECA, *et al.* Comments at 15-16 (bill-and-keep for VoIP would increase opportunities for regulatory arbitrage); TWC Comments at 9-11 (subject VoIP to the same regime as other forms of traffic); Comments of Google Inc. at 8 (bill-and-keep is appropriate for VoIP-originated or terminated traffic); Comments of Cablevision Systems Corporation and Charter Communications at 2-3 (VoIP should immediately be subject to the same ICC regime that applies to circuit-switched traffic) ("Cablevision-Charter Comments").

[24] Comcast Comments at 4. As Comcast explained, for purposes of its proposal, the originating end of a toll-free call would be treated as the terminating end. Comcast Comments at 6 n.10; CRUSIR Comments at 2 (stating that 8YY toll-free call origination should be treated as termination).

[25] *See* NPRM ¶¶ 10, 14, 527 (establishing acceleration of the transition from circuit-switched to IP networks as one of the four guiding principles of the Commission's reform efforts).

Most commenting parties agreed with Comcast that there is an urgent need for the Commission to adopt a unified intercarrier compensation regime that treats uniformly all terminating switched voice traffic regardless of the jurisdictional nature of the traffic or the technology used to carry the traffic.[26] Although parties disagreed on what the specific uniform treatment should be, there was considerable agreement that the access charge rates that currently apply to terminating TDM-based traffic are excessive and should not be used.[27] Several parties also acknowledged that the Commission should adopt default rules for intercarrier compensation that promote the deployment of broadband, but cautioned that the FCC should avoid a flash-cut in existing rates.[28] In addition, many parties recognized that it would be counter-productive to subject VoIP traffic to the current intercarrier compensation scheme governing traditional PSTN traffic.[29] Instead, those parties proposed VoIP-specific default rules that would apply until the FCC adopts global intercarrier compensation reform for all telecommunications traffic.[30]

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[26] *See, e.g.,* Cbeyond *et al.* Comments at 4-6; TWC Comments at 9-11 (supporting a unified default ICC rate for all traffic); Comments of Bright House Networks Information Services, LLC at 2-3 (noting that, in the long run, the same ICC rates should apply to all traffic).

[27] *See, e.g.*, Comments of the Voice on the Net Coalition at 4-6 (imposing the access charge regime on VoIP providers would "saddle[] [them] with inefficient costs that could artificially limit . . . availability and burden consumers with above-cost charges"); T-Mobile Comments at 11; CRUSIR Comments at 2-3 (supporting a single graduated scale for all traffic based on the volume of traffic that each provider terminates).

[28] *See, e.g.*, Cox Comments at 4-5 (acknowledging that all networks should shift to IP, but opposing a flash cut in intercarrier compensation rates).

[29] *See, e.g.*, Sprint Comments at 5-6; AT&T Comments at 28-29 (arguing that the legacy intercarrier compensation regime deters the move to IP); T-Mobile Comments at 11-12 (explaining that it does not make sense to impose current ICC rules on VoIP); CTIA Comments at 12-13 (arguing that the FCC should not apply existing ICC rules to IP-originated traffic).

[30] *See, e.g.*, Verizon Comments at 5-6, 10, 15-19 (noting that a transitional mechanism for VoIP traffic "can work in combination with any other transition mechanism the

In sum, there is support in the record for a proposal that: (1) would establish the interim transport and termination rates applicable to VoIP traffic while the FCC completes its comprehensive reform of intercarrier compensation; (2) would set the rates at more economically efficient levels than current access charges – especially intrastate access charges – consistent with what should be the primary objective of any sound long-term intercarrier compensation plan for all forms of traffic; and (3) would advance the FCC's goal of promoting broadband deployment. As explained below, Comcast's proposal is the only one that effectively meets all of these important criteria.

As numerous parties explained, it makes no sense to subject VoIP-originated traffic to the current intercarrier compensation regime that the FCC is in the process of reforming. In fact, at least one party argued that LECs are not even permitted to assess access charges on VoIP-originated calls.[31] The sounder approach, as Comcast has proposed, is to adopt an interim regime for VoIP-originated traffic that will lead to more economically efficient charges than the current access regime and create an incentive for providers to upgrade their networks to offer IP-based broadband.[32]

Commission adopts as part of its broader intercarrier compensation reform"). In some instances, the VoIP-specific proposals anticipate or mirror the party's proposed approach to more comprehensive reform of intercarrier compensation. For example, Comcast's proposal that the FCC move terminating charges for VoIP-originated traffic to reciprocal compensation rates previously set by states using the Commission's prescribed methodology is consistent with its proposal to move all traffic under the same regime. *Compare* Comcast Comments of April 1, 2011, with Comments of Comcast Corporation, WC Docket No. 10-90 (April 18, 2011).

[31] Sprint Comments at 6.

[32] Concerns that "special rules" for VoIP-originated calls could undermine broadband deployment are misplaced. *See, e.g.*, Cox Comments at 7; Windstream Comments at 6-7 (special rules for VoIP would undermine broadband deployment by depriving high-cost providers of revenues they need to pay for broadband deployment). To the extent that providers need additional revenues to support broadband investment, those payments

Some parties raised concerns that the adoption of VoIP-specific rates that are less than existing access charges may encourage voice providers to seek to have their TDM-originated traffic treated as VoIP-originated traffic by the terminating service provider.[33] Comcast believes that one administratively feasible approach to this transitional issue would be to require parties to certify the percentage of their voice traffic that originates in IP, similar to the manner in which providers currently identify their volumes of local and long distance traffic by providing percentage interstate usage ("PIU") and percentage local usage ("PLU") factors to terminating carriers.[34] To encourage reliable reporting, the FCC could require providers to certify to the accuracy of the factors they supply for VoIP-originated traffic and make their records available for auditing. The Commission would then vigorously enforce the penalties that would apply to those that submitted false information to the agency.

Verizon's suggestion that voice traffic that originates or terminates in IP should be subject to a default rate of $.0007 per minute, even if the traffic originates on a TDM network, ignores the current asymmetrical allocation of the costs that must be incurred to terminate such TDM traffic on an IP-based network.[35] Under Verizon's proposal, an IP-based provider would continue to bear the cost of acquiring and maintaining both the facilities necessary to transport traffic between the interconnection point with the TDM-

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should come in the form of explicit subsidies from the CAF, not from implicit intercarrier compensation subsidies that distort the market and create arbitrage opportunities.

[33] *See, e.g.,* Cbeyond *et al.* Comments at 6; Comments of EarthLink, Inc. at 3; Comments of Pac-West Telecomm, Inc. at 7-8; Windstream Comments at 7.

[34] *Cf., e.g.*, AT&T Comments at 24-25 (proposing to use auditable PIUs to ensure proper settlement with terminating carriers when CPNs are not available).

[35] *See* Verizon Comments at 15-19; *see also, e.g.*, AT&T Comments at 29 (proposing "symmetrical treatment" of IP/PSTN and PSTN/IP traffic).

based network and the IP-based network as well as the facilities required to convert the traffic to IP-based packets for termination. Verizon's proposal would bar the IP-based provider from recovering those additional transport and termination costs from a TDM provider that originated the traffic.

Moreover, in contrast to Comcast's proposal, Verizon's approach would not create any incentives for TDM-based providers to upgrade their local networks to an IP-based broadband infrastructure. To the contrary, Verizon's proposal would penalize providers that have invested in modernizing their networks by requiring them to incur the additional costs associated with terminating TDM-based traffic on their networks. Accordingly, Verizon's proposal is inconsistent with the FCC's public interest goal of promoting broadband deployment.

Finally, although several comments included discussions of the appropriate classification of VoIP as either a telecommunications or information service,[36] there is no need for the Commission to address the classification issue at this time.[37] As Comcast and others have explained, the Commission has authority to adopt an intercarrier compensation regime for VoIP traffic, regardless of whether interconnected VoIP is ultimately classified as a telecommunications or information service.[38]

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[36] *See* Comments of COMPTEL at 2-5 (VoIP is a telecommunications service); Sprint Comments at 3-4 (VoIP is an information service); CTIA Comments at 13 (VoIP is inherently interstate); Cbeyond, *et al.* Comments at 7-15 (VoIP should be classified as a telecommunications service).

[37] *See, e.g.*, Cablevision-Charter Comments at 7-10; Comments of XO Communications LLC at 12-13.

[38] *See, e.g.*, Comcast Comments at 7-8; AT&T Comments at 26-28.

III. CONCLUSION

For the reasons explained above, the Commission should adopt Comcast's approach to the treatment of VoIP-originated traffic, as well as Comcast's proposals for addressing phantom traffic and access stimulation.

Respectfully submitted,

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April 18, 2011

Certificate of Service

I hereby certify that on this 18th day of April, 2011, I caused a true and correct copy of the foregoing Reply Comments of Comcast Corporation to be mailed by electronic mail to Best Copy and Printing, Inc., fcc@bcpiweb.com.

/s/ Ruth E. Holder
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